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Grand Trunk Railway Company of
Canada

The
Porcupine Gold Fields
and the
Cobalt Silver Mines



**NORTHERN ONTARIO,
CANADA**

ISSUED BY
GENERAL PASSENGER DEPARTMENT
Grand Trunk Railway System

MARCH, 1912

PEERLESS TEMAGAMI

THE UNSPOILED WILDERNESS AND A PARADISE FOR CANOEIST AND CAMPER

THE lover of Nature has to search farther and farther for the unspoiled wilderness as the years go by. Every year miles and miles of the "forest primeval" are being sacrificed to the onward march of civilization. Areas that would put to blush a kingdom's fee are every year sacrificed to the lumberman's greed. Soon the majority of the great Northland's forest playgrounds will be things of the past, and the sportsman and the wilderness lover will have to go farther afield to find the unbroken haunts of their finned, feathered and furred friends.

THE TEMAGAMI FOREST RESERVE

Owing to the far-sighted policy of the government of the province of Ontario, Canada, a magnificent area of pine lands, stretching fifty miles from north to south, and sixty miles from east to west, has been withdrawn from settlement and constituted a timber reserve. Into this magnificent forest kingdom no settler or lumberman has been, or will be, allowed to enter. No timber has been removed, and in the future only the ripened pine, marked by the Forest Ranger's blaze, will be removed from Temagami's wooded hills and islands. All is now as Nature left it, rolling hillsides clad in interminable green, islands and islets like emerald gems set in a field of bluest blue; and this it will be for the next, and the next, and succeeding generations.

Here you must come, if you really wish to enjoy Nature. Here are no conventional settler's clearings. Here are no sawmills sending out trails of black smoke, and mountains of bark and sawdust, to poison the clear air, and pollute the crystal waters. Just a mile after leaving the "fire-horse" at Temagami station you are in the bosom of the unbroken forest, surrounded by slopes of pine and balsam and fir, and lost in a labyrinth of islands and inlets and channels stretching for interminable distances north and south and east and west.

LAKE TEMAGAMI

Resting in the midst of this green wilderness of the Temagami Forest Reserve like some gigantic octopus with its innumerable legs and arms and feelers stretching out in every direction into this wonderland of evergreen hills, lies Lake Temagami.

Temagami! Pronounced te-mog'-a-me with a full, open, deep-chested tone. How the very sound of this Indian word for "deep water" carries one off into the pine woods!

Imagine this lake with its 1,600 islands and islets! There are 1,259 islands surveyed and marked on the government map, ready for leasing to the prospective cottager.

Think of Temagami with its 3,000 miles of shore line! If you paddled around it once to explore its beauties you would have a canoe trip from Halifax to Vancouver and on some 200 miles into the Pacific Ocean. All this you may have without once making a carry or leaving the waters of Lake Temagami. But, if you wish to leave Lake Temagami, and cross the innumerable portages you have hundreds of other trips at your command and hundreds of other lakes to visit.

And it's all so easy, too. Thirty hours from Boston, twenty-four hours from New York or Chicago, will take the traveller to the heart of the happiest hunting ground upon this mundane sphere.

The Temagami region is reached through Temagami station, a distance of thirty miles south of Cobalt or Latchford. There is good hotel accommodation on Lake Temagami, three large hotels at different points on the lake catering to the wants of the angler, sportsman and tourist. A beautiful booklet, descriptive of this region, profusely illustrated with halftones from direct photographs, will be sent to any one applying for same to any of the Grand Trunk Railway Agencies, a list of which is given herein.

The Porcupine Gold Fields

**The Rich, New, Mineral Area
in Northern Ontario**

—AND—

The Silver Mines of Cobalt

**From which \$65,000,000 worth
of silver has been taken**

**An accurate description of two of
the most famous mining camps in
the world, with careful statistics
covering development and production.**

**BOTH CAMPS REACHED MOST DIRECTLY,
EXPEDITIOUSLY AND COMFORTABLY BY
THE GRAND TRUNK RAILWAY SYSTEM**



Prospectors on Montreal River



Grand Trunk Porcupine Express

THE HAND OF DESTINY has decreed great things for the northland of Ontario. In its vast unpeopled stretches a combination of natural resources has been assembled in such a way as to indicate that in process of time New Ontario will support an immense population. Mineral wealth in abundance lies imprisoned in the solid rock that hitherto has been regarded as an impassable barrier to progress. Right at hand foam resistless waterfalls, which, when harnessed, are powerful to wrest the precious metals from their granite prison. Rich agricultural land skirts the mineral areas, with potentiality for the support of millions of industrial workers. Far-stretching forests are ready to provide material for the erection of all needed buildings. And what is perhaps most important of all, access to this new country has been rendered almost ridiculously easy. When one recalls the hardships that Canada's first settlers underwent in entering the country, the contrast with the Pullman-car methods of transport of the present day into this new region is most marked.

The discovery of silver at Cobalt in 1904 was a great advertisement for New Ontario. The finding of gold near the shores of Lake Porcupine in 1909 has set the seal of prosperity on this wonderful northland. Hereafter there can be no doubters. The country has demonstrated its possibilities, and the peopling of its waste spaces may now go forward apace, with every prospect that, as the years pass, fresh discoveries of mineral resources will but add to the wealth of its settlers and to the renown of its borders.

The Porcupine Gold Camp

To-day Porcupine occupies the position in the eyes of the world that Cobalt held five years ago. The new gold camp, the first in Ontario, is situated about 100 miles, as the crow flies, north of Cobalt and thirty miles south of the Grand Trunk Pacific's main line. It is located in a district characterized by the presence of a number of small lakes, the land being fairly level and well wooded, save where the forest fires have cut wide swathes through it and left charred trunks behind. Here and there bald rocks crop up and it was on the surface of these that the prospectors of three years ago noted the ore-bearing veins and announced their discoveries to an excited public.

X The rush to the shores of Porcupine Lake in 1909-1910 is now a matter of history. Suffice it that some 12,000 claims were staked out in the surrounding country, of which 8,000 were in good standing on October 1, 1911. The widespread nature of the finds has brought about a different condition of things than prevailed in the Cobalt district. The silver mines are all centered within a short radius of the town, so that Cobalt became in fact, as well as in name, the home of silver mining. But in Porcupine, the long distances between the mines, extending to many miles, have irresistibly led to the establishment of quite a number of towns or settlements all through the district. Beginning with Porcupine, or Golden City, as it is more generally called, at the north end of Lake Porcupine, there is Pottsville, which has not amounted to much since the fire of 1911; South Porcupine, the county town of Tisdale Township, in which most of the gold has been found; Aura Lake, a settlement on Pearl Lake, round which several of the most promising prospects lie; Timmins, the town which the Timmins-McMartin Syndicate are building, not far from the Hollinger Mine; Mattagami Heights, a residential townsite, and Mattagami Landing, on



Bruce Avenue, South Porcupine, Ontario

the river of the same name. The distance from Golden City to Mattagami Landing is close on ten miles, giving some idea of the extent of the camp.

South Porcupine has risen rapidly from the ashes of the disastrous fire of July, 1911, which left not a single building standing. It has practically been rebuilt since September 1st, as it was not until then that lumber could be procured. To-day a smart, up-to-date town awaits the newcomer, with hotels of surprising excellence, several banks and churches, and stores in which all sorts of merchandise are offered for sale. Naturally much of the building is of a temporary character, and shacks abound, but the place has been well laid out and there are 2,800 feet of water mains for fire purposes already in place. With the growing prosperity of the district, South Porcupine will become an important town. It is now the terminus of the railway.

Golden City, which was the terminus of the overland route from Kelso before the railway was built from Iroquois Falls to South Porcupine, has kept pace with the development of the district and, as the Government offices are located here, will undoubtedly continue to be a place of interest.



South Porcupine, Ontario

Here, too, evidences of progress are to be noted, and water mains, a sewage system and all the other modern appliances are within sight of completion.

Aura Lake and Timmins are as yet at an early stage of their development, but the extension of the railway from South Porcupine to Timmins, now almost complete, will mean a boom to both points. Timmins at the opening of 1912 had sixty buildings up and water mains put down. It has been laid out on a generous scale, and provision has been made for schools and churches, so that it may be a fitting home for the miners on the neighboring properties.

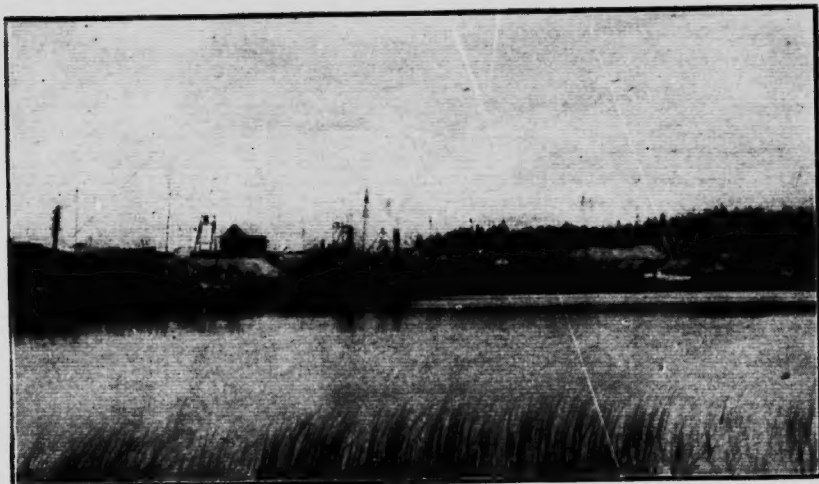
A careful estimate places the population of the entire Porcupine district, at the first of the year, at 5,000, with a steady influx of new settlers. The



Golden City, Ontario

crowd is most cosmopolitan in character. Mining engineers who have had experience in all parts of the world; hardy prospectors; workmen of all nationalities; Chinamen in the laundry business; Swedes and Italians; Indians—all rub shoulders in this interesting new settlement.

In brief, this is the situation so far as settlement is concerned. A double train service daily, in both directions, has brought the district within a comparatively few hours of the older portions of Ontario, and has made access to the various mine workings cheap and expeditious alike for the miner, the prospector, the capitalist, the tourist and the commercial man. The Grand Trunk Railway System now operates through Pullman cars from Toronto to South Porcupine, giving an expeditious service in connection with all their lines in Ontario and associate lines in the United States. When the new Grand Trunk Pacific route across the great clay belt is ready, this service will be largely augmented, providing not only a direct route from Toronto, but from Montreal and Quebec as well. The Pullman cars now operated are of the latest type, with electric-lighted berths, and dining cars are attached to all trains making daylight runs.



Pearl Lake Mine, Porcupine, Ontario

To reach different sections of the camp from South Porcupine, frequent stages are despatched, for which a small charge is made. The Ontario Government has constructed a road from Porcupine to Mattagami Landing, over which good time can be made, and the Department of Public Works is also building new roads south from the Landing to Ogden and between Shaw and Deloro Townships to the Eldorado Line, so that, all things considered, the prospector, traveller or settler has an easy time of it, for everything is ready for him.

Roughly speaking, the Porcupine gold finds are confined pretty much as yet to three districts or, in other words, there are just three groups of properties on which prospecting work has been carried on to any extent. First, there are the mines in the Pearl Lake section, of which the Hollinger, the Vipond, the McIntyre, the Jupiter and the Rea are leading examples. Second, there is the group around the Dome, including the Dome Extension, North Dome, Schumacher Syndicate and West Dome. And third, there is an interesting group to the north of Porcupine Lake, taking in the Scottish-Ontario, the Dobie, Miller-Porcupine, Crown Chartered and Davidson, among others. Besides these well-defined groups, there are a



Dome Mine, Porcupine, Ontario

vast number of prospects spread over at least twelve townships, among which there seem bound to be some that will eventually become paying mines.

It is probable that gold was first noted in the district in 1896, when Mr. E. M. Burwash, a geologist in the service of the Ontario Government, passed through with a survey party. In his report for that year he distinctly states that "gold appears to be quite widely distributed, both in veins which are of tolerably frequent occurrence and in mineralized portions of the rock itself." Similar reports were made from year to year to the Ontario Bureau of Mines by other geologists, all confirming Mr. Burwash's discovery, but it was not until 1906 that the first prospecting was done in the area. A shallow pit was sunk by some men from Sudbury on a claim adjacent to what is now known as the Hollinger mine, but evidently the



Dome Mine Compressor, Porcupine, Ontario



Vein of Gold Four Feet Wide, on Big Dome

quantity of gold discovered was not deemed sufficiently great to warrant any continuance of the work. The next work was done by Mr. A. G. Hunter, on the northeastern shore of Porcupine Lake, but again without definite result. In 1909 Mr. J. S. Wilson penetrated the country in search of asbestos and found gold to the south of the lake. At almost the same time the Bannerman Brothers appeared on the scene and began staking out claims north of the lake. Then followed a veritable army of prospectors and camp followers, streaming overland from Kelso, and the Porcupine gold camp became an established fact.

Technically speaking, the formation of the district is a Keewatin schist, which was primarily a basalt, quartz porphyry, serpentine or felsite. Though movements considerably fracturing have taken place in several areas of the district, these fracture zones, by silification and replacement, have formed a more or less perfect series of veins. By a later movement the veins were again fractured and a second period of silification ensued, this later solution carrying the gold. Owing to the localization of the second fracturing, certain veins became very rich, while others remained barren.

As the Keewatin is the primary rock of the continent, it is reasonable to suppose that the veins will continue to great depth without any alteration, and therefore with values unaltered. In this respect the gold mines of Porcupine afford a contrast to the silver mines of Cobalt, where the veins do not extend to any great depth. Already, at the Pearl Lake Gold Mines, it is reported that drill cores have shown a workable vein of \$20 ore at 800 feet and again at 1,200 feet. Couple with depth, the wide area of country covered by the veins, and it must be apparent that only the fringe of the possibilities of the district has as yet been touched.

Up to the beginning of 1912 all work done in developing the mines has been of a prospecting kind. No gold has as yet been produced commercially, though the assay offices in connection with two or three of the larger mines have shipped a few bars of the precious metal, and some coins have been struck at the Ottawa mint from Porcupine gold. On the other hand prospecting has been pushed forward to such an extent as to demonstrate the presence of extensive ore bodies and to warrant the expenditure of large sums of money on the erection of stamp mills, concentrating and cyaniding plants. The first of these, that on the Dome property, starts operation early in 1912.

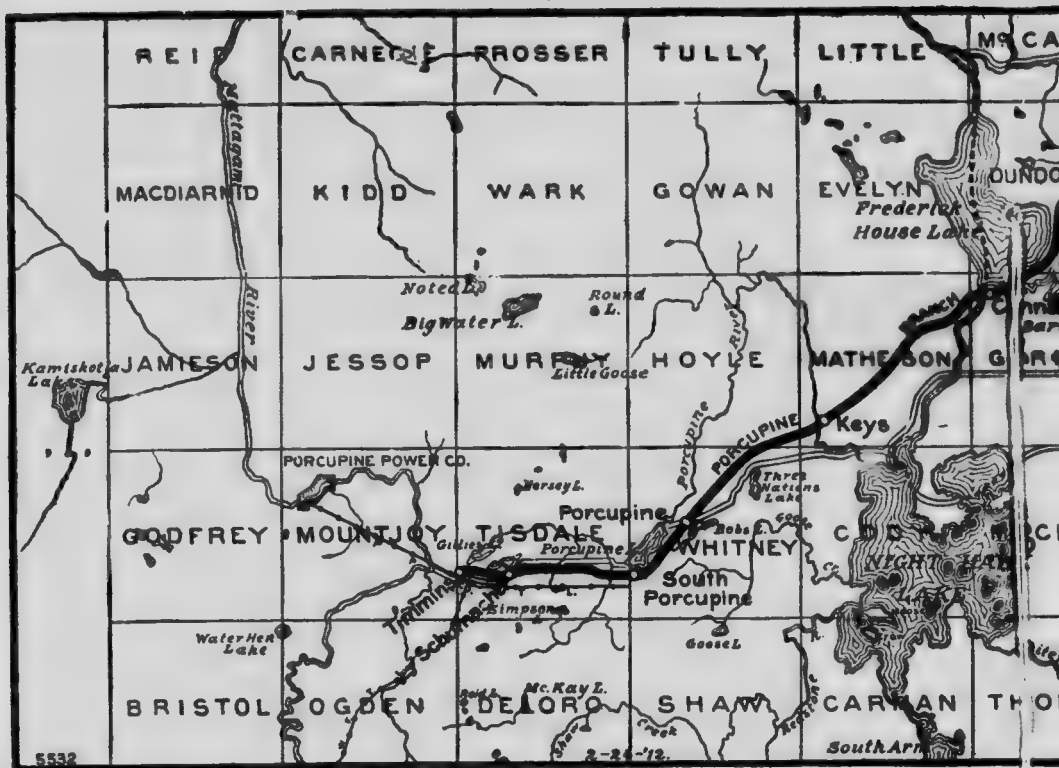
Work on the Dome has been advanced probably farther than at any other mine. This mine has one of the largest showings of quartz, which here rise above the general low swamp level. It is stripped for a distance of 850 feet and in places is 300 feet wide. Free gold is seen at a number of points on this property, both on large veins and in a number of smaller ones, paralleling the principal one. The development of the mine consists of seven shafts, all fifty feet deep, and a large number of drill holes cutting the vein at various depths to a thousand feet vertical. It is announced by the owners that the Dome ore will average \$12 a ton. Already a railway siding has been run into the property, numerous substantial brick buildings



Gold Sidewalk, Dome Property, Porcupine, Ontario

for office staff, engineers and miners have been completed and a forty-stamp steel-construction mill has been erected. The Dome management intend to use steam power in operating the mine and have installed a big power plant.

The Hollinger mine, near Pearl Lake, is developed by 1,500 feet of cross cutting, and 1,400 feet of drifting on the principal vein at the 100-foot level, and several hundred feet at the 200-foot level. The cross cutting at both levels has shown a mining width of about thirty feet, which is announced by the management to average better than \$25 a ton. The work of mill construction is advancing rapidly. It is being built of timber and will contain forty stamps, giving a capacity of well over 300 tons a day. Other items of the plant are well ahead, and between three and four hundred men



are employed. A new main shaft is being sunk, preparatory to the starting of the mill, power for which will be taken from the Porcupine Power Company.

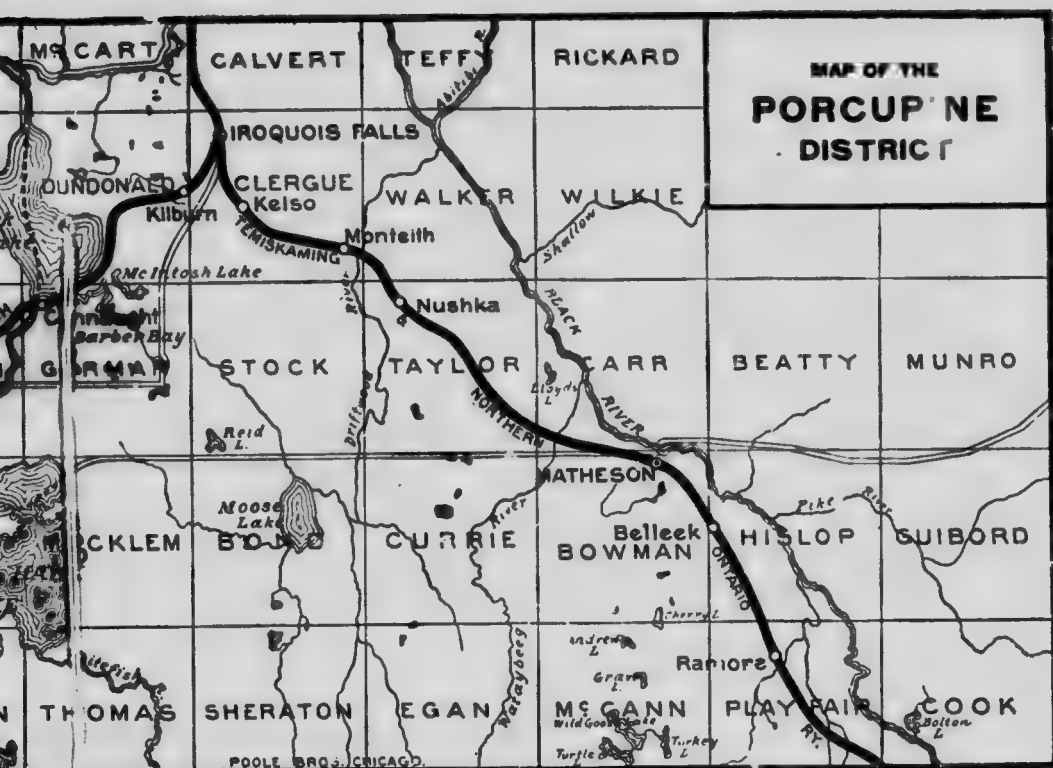
The Porcupine Gold Mines Company, or the Vipond, is developed by a shaft 100 feet deep and some 400 feet of drifting. A rich portion of the vein is about two feet and six inches wide and will average \$50 per ton. It is reported that a good milling average can be had twelve feet in width. A twenty-stamp mill has been ordered by the management.

The Dixon group, adjoining the Hollinger, are being developed vigorously with gratifying results. Three shafts have been sunk on this property, all on pay ore. West of the Hollinger, the Miller-Middleton, which is controlled by the same syndicate, has struck an ore body thirty feet wide at the sixty-foot level, that shows a large body of milling ore. The McIntyre, northeast of the Hollinger, has all the Dixon and the Hollinger veins, and development results have been so satisfactory as to warrant the installation of a ten-stamp mill, later to be enlarged to thirty stamps.

Of the other mines in the district, mention has already been made of the Pearl Lake Gold Mine, which has been developed principally by drilling. The Jupiter has three shafts, seventy-five feet deep, on a vein six to ten inches wide, which gives promise of being one of the greatest veins in the camp. The Rea Mines have a shaft 300 feet deep, where they have secured good values. They will order a mill after sinking the main shaft to 400 feet.

Among the many properties working with more or less success in Tisdale Township are the Armstrong-Booth, Plenaurem, Foley-O'Brien, Dome Extension, North Dome, West Dome and Schumacher Syndicate. All of these properties promise well, but are still largely in the prospect stage.

Across the boundary of Deloro Township are located the Preston East Dome, Little Pet, Imperial and Standard, all of which have favourable



indications. Free gold is found in a number of places in this township, and it may be that future development will show it to be as rich in gold as Tisdale.

The third group of mines lies for the most part in the Township of Whitney and northeastern Tisdale. Here the Scottish-Ontario, said to be the original Porcupine claim, has done the greatest amount of work, namely 800 feet of drifting and cross cutting at the 100-foot level. A new plant has been ordered preparatory to more vigorous development. To the east of the Scottish-Ontario the Mulholland Syndicate have a six-foot vein showing free gold at the 100-foot level. East again of the Mulholland is the property of the Hughes Porcupine Mines, Limited, with one of the richest surface showings in the district. At twenty feet large amounts of free gold have been found. East of the Hughes are the La Palme, Three Nations and Porcupine Keora, all of a promising nature. To the west of the Scottish-Ontario the Dobie, Miller-Porcupine, Crown Chartered and Davidson are developing with gratifying results.

The foregoing enumeration of working properties will afford some idea of what is going forward in the Porcupine Camp at the opening of 1912. It will show at any rate that the men who are putting up the money have every confidence in the future of the district. All told, some forty prospects are being actively developed. Work on others has been temporarily suspended, owing to lack of funds, while it was to be expected that some would turn out to be wild cats, as has been the case. Meanwhile there are properties staked out in Ogden, Shaw, Langmuir, Turnbull and McArthur townships, and the Cripple Creek Section, that are worthy of investigation, and no one can tell what the future will develop. The country is shot with mineral wealth, and at any moment new finds may be made that will put even the most famous Porcupine discoveries into the shade.



Dome Mine, Porcupine, Ontario

All the gold to come from Porcupine will be in the shape of bullion. There will be no shipping of ore or concentrates to smelters as in the case of Cobalt. The mills being erected will make a complete severance of the gold from the rock in which it has lain embedded during the centuries. While processes may differ in detail, the general plan adopted is to separate and concentrate as far as possible by mechanical means—stamps, tube mills and Deister tables—and then take out the gold by amalgamation and cyaniding. The estimated cost per ton will be about \$3.50, so that a fair profit will accrue from even the lowest grade ores.

It is significant in the case of Porcupine that electric power was available before the mines were ready for it. At Cobalt it was six years before the hydro-electric systems were prepared to relieve the burden imposed by



Hollinger Mine, Porcupine, Ontario



McIntire Mine, Porcupine, Ontario

expensive fuel. But at Porcupine experience taught, and the Porcupine Power Company was formed early in the history of the camp. It develops 3,000 horse power at Sandy Falls, on the Mattagami River, and carries it direct to the mines. This will mean an economy of mine operation at the outset.

The Cobalt Camp

From the mining camp in the prospect stage to the mining camp in full career, is but a short and comfortable journey by rail of 150 miles. Cobalt is to-day a staid and settled institution, the roar of its stamp-mills echoing day and night from the rocky hills that surround it, its cars of ore going out with the utmost regularity, its shareholders drawing their dividends quarterly. The only change to be noted from year to year is a greater economy of effort, an increasing consumption of low-grade ores, and a more marked concentration of its output.

It would be foolish to contend that the resources of the camp are inexhaustible. Each day reduces the supply by just so much. But that the mines have a long life ahead of them yet is becoming more and more apparent. Even small mines are showing extraordinary vitality, and fresh discoveries are being made on the larger ones which demonstrate that the possibilities of the situation are as yet unlimited. During 1911 important discoveries were made on the Savage and the Cobalt Townsite, while on the Crown Reserve, McKinley-Darragh, Nipissing, Lawson and Tretheway, extensive new deposits were located. The fact that the Nipissing have put up a new mill within the past year, which treats five tons of high-grade ore a day, and that a new 200-ton mill is going up across Cobalt Lake, proves that the directors have confidence, and that their engineers have found the ore to deliver. Further, the same company are installing a big hydraulic plant to sluice off the entire surface of their property, so that every inch of rock may be prospected.



City of Cobalt Mine, Cobalt, Ontario

Other mines have added to their equipment during 1911, or are planning further developments in 1912, a sure sign that there is plenty of life in Cobalt yet. The Nova Scotia has increased the capacity of its mill and is doing customs work. The Temiskaming and Hudson Bay have completed their mill. The Beaver is erecting a concentrating plant. The Northern Customs Concentrator, the largest mill of its kind in Canada, has added to its capacity. In fact, all around there are signs of progress.

And what has been the net result? Cobalt is still on the up-grade. For 1911 Cobalt's silver output aggregated 32,000,000 ounces, as against 30,500,000 for 1910. In value, the 1911 production was approximately \$16,500,000, compared with \$15,478,047 in 1910. Shipments of ore and concentrates aggregated 25,000 tons, a marked decline, it is true, from 1910, when 34,000 tons went out, but attributable entirely to the larger production of concentrates. Dividends paid to shareholders amounted to \$8,700,000. When one computes the total disbursements to shareholders, the richness of the mines is made abundantly apparent. The figures are: total production to the end of 1911, \$64,868,333; total dividends, \$33,500,000, or over fifty per cent.

The town of Cobalt, while suffering a considerable loss of population owing to the rush to Porcupine, has now 4,768 people within its limits, and is in every respect an established town, with several schools and churches, three and one-half miles of water mains and a similar length of sewage. It has an assessment of \$2,300,000. Buildings of a permanent nature have superseded the original shacks, most of which were wiped out by fire. The railway passes directly through the town, and a fine large depot has been erected for the convenience of the travelling public.

While there are about forty mines now in operation, only some nineteen or twenty may be regarded as regular producing mines. The rest ship intermittently. Most of the product of the mines goes out in the form of concentrates, to be treated at various smelters in Canada, the United States or Germany. Nearly all the high-grade ore is sent to the Canadian smelters at Orillia, Deloro, Thorold or Copper Cliff. Low grade goes generally to the plants of the American Smelting and Refining Company at



600 lb. Nugget of Slate and Silver, City of Cobalt Mine, Cobalt, Ontario

Perth Amboy, N. J., or Denver, Colo., or to the Pennsylvania Smelting Company, Carnegie. The Saxton Government in Germany also gets some for its smelter from the Crown Reserve. Roughly speaking, about 30% of the Cobalt shipments go to Canadian smelters, 68½% to American smelters and 1½% to Germany.

On the other hand four companies are now using chemical processes for the treatment of some of their ore, and extracting the silver in that way, shipping it out as bullion. The Buffalo uses the cyanide treatment on some of its tailings. The O'Brien makes a coarse water concentration, and cyanides the rest. The Nova Scotia makes a water concentration and extracts the silver from the concentrates by amalgamation, cyaniding the tailings; it ships bullion only. The Nipissing extracts silver from its high-grade by a combination of amalgamation and cyanide. The tendency will probably be to increase the use of these methods in the future.

Fourteen reduction mills were in operation in the Cobalt Camp during 1911, with daily capacities ranging from 36 to 200 tons, a total of 1,416 tons. Apart from those mentioned as having adopted special chemical treatment, the others all use water concentration. The average extraction in the mills is from 80 to 85 per cent, depending on the character of the ore, and grade of the mill heads, the cost averaging \$3.00 per ton. The grade of ore treated averages about twenty-five ounces per ton, but ranges from 100 down to ten ounces. Above 100 ounces it is found more profitable to ship to the smelter without further treatment.

During the early years of development Cobalt mines were dependent on steam power to drive their drills and run their mills. Large importations of coal were necessary, amounting in 1909 to 105,416 tons. In 1910, however, hydro-electric energy became available, and the coal bill was cut down almost to the vanishing point. There were originally three power companies, but these have now been reduced to two, although three plants are still operating. The most picturesque system is that of the Northern Ontario Light and Power Company, which runs a plant at Ragged Chutes on the Montreal River, nine miles from Cobalt, that compresses air by hydraulic means and supplies it to the mines through twenty-inch steel pipes, laid



Conlago Mine, Cobalt, Ontario

in air-lines across the country. This power is used to drive the drills. The same company has a plant at Grand Chutes, six miles from town, for the development of electric energy, utilized in the concentrating plants and for lighting purposes. The third plant is on the Matabitchouan River, twenty-five miles from Cobalt, and is operated by the British-American Power Company. It furnishes electric power to several mines, which is used both to run air compressors and mill machinery. The advent of hydro-electric power in May, 1910, meant a tremendous reduction in operating expenses.

The residence system is now general throughout the camp, and the miners are comfortably housed and fed at the mines, paying sixty cents a day for board and lodging. They work nine hours a day and receive on an average \$80 to \$85 a month. During 1911, the number working in the mines was about 3,600, a slight reduction on the number for 1910, owing to the fact that less surface work and prospecting was done. The wage bill of the Cobalt mines is over a quarter of a million dollars a month, a circumstance that means much not only to the merchants of the town, but to the farmers of Ontario as well.

OTHER MINING CENTRES.

While Porcupine and Cobalt are the largest mining centres in New Ontario, they are not the only ones. Development work has been carried on at several other points with fair prospects of success. At Swastika, on the Temiskaming and Northern Ontario Railway between Cobalt and Porcupine, some half-dozen gold prospects, including the Swastika and the Lucky Cross, are being followed up. In Monro Township, ten miles east of Matheson, a small settlement on the same railway, at least three gold mines have been located, the Gold Pyramid, Detroit and Ontario, and 170 ounces of the mineral were shipped from here as a preliminary last year. At Larder Lake three properties are being developed, including the Doctor Reddick and the Harris-Maxwell.



Buffalo Mine, Cobalt, Ontario

Besides Cobalt there are three lesser silver camps in the north country, of which the most famous is Gowganda. At this point, during the past year, the Millerette have completed a mill, and at least two mines have become regular shippers of ore. Silver is also being mined at South Lorrain and Elk Lake.

THE CALL FOR SETTLERS.

The rapidly increasing population of the mining centres of North Ontario, which now amounts to many thousands, has brought vitally to the fore the question of food supply. The miners, prospectors and business men of the north are a hardy lot of men, requiring a plentiful supply of good, health-giving food. The consumption of meat alone in Cobalt and Porcupine is enormous. Practically all this food must come in from other portions of Ontario, where prices for meat and farm produce are high to begin with. The result is that the cost of living is high, and mining operations are being handicapped to that extent. The Mine Managers' Association of Cobalt has begun to investigate the subject, and is seeking to find some relief.

The only possible remedy is not far to find. The adjacent farming areas must be peopled at once. Providence has been kind to New Ontario. It gave abundant water power to facilitate the operation of the mines. It has provided millions of acres of fertile land, within a very few miles of the mining camps, on which sufficient produce can be raised to support a huge population. All along the line of the Grand Trunk Pacific, through the clay belt, there are excellent opportunities for the enterprising farmer to settle, and he does not need to wait for a market or have any anxiety about selling his produce. There is no better chance in the world to-day for the farmer than right up in New Ontario near the mines. There must be at least twenty thousand people in the region, none of whom are growing anything, even for their own support.



Swastika Mine, Swastika, Ontario

INFORMATION FOR THE PROSPECTOR.

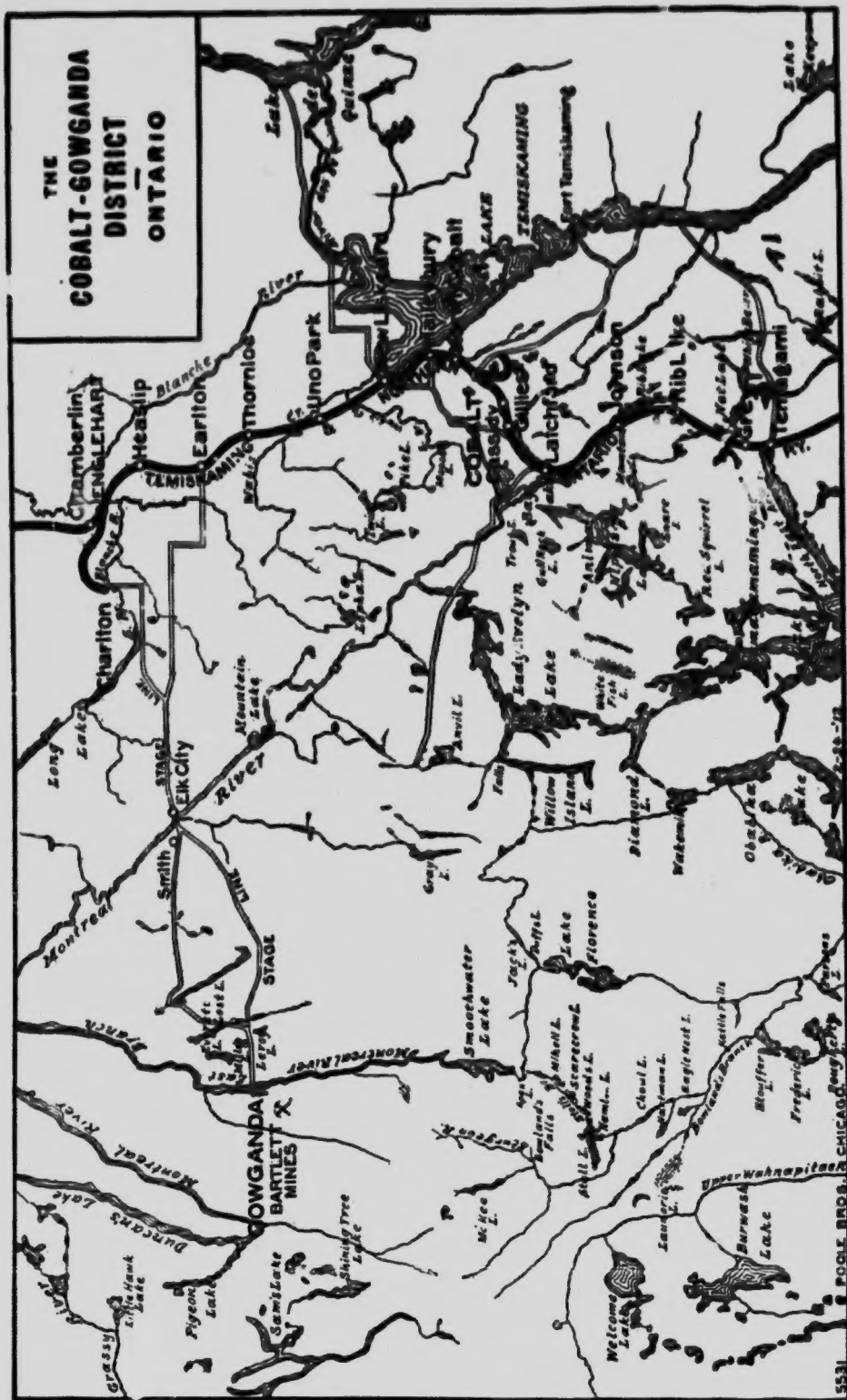
The Province of Ontario has enacted special regulations covering the staking of mining claims. A prospectors' license costs \$5.00, and is good anywhere except in the forest reserves, where an extra permit costing \$10 is required. Armed with his license a prospector is entitled to stake out one, two or three claims of forty acres each in any one mining division. Having done so he is required to record the claims at the nearest recorder's office and pay down \$2.00 for each claim. Following this he must do thirty days' development work, of not less than eight hours per day, on each claim during the first three months after registration, sixty days' work during the first year thereafter, sixty days' work during the second year, and ninety days' work during the third year, all of which must be duly recorded. He is then given a patent to the property on payment of \$3.00 per acre in surveyed areas and \$2.50 in unsurveyed areas.

In practice, most of the work of prospecting is done by professionals backed up by capitalists, who pay them a salary. They usually work in pairs and are given a proportion of anything they stake. While one person is only entitled to one license, yet he may take out additional licenses in the names of his relatives and friends and thus make sure of being able to stake a considerable number of claims. Of course there is a good deal of trafficking in claims, but to keep them alive the necessary work must be done on them.

HOW TO REACH PORCUPINE AND COBALT.

From the New England States the road to Cobalt is by the Grand Trunk Railway System via Niagara Falls or via Montreal. From New York south and west as far as Pittsburg, you come in via Niagara Falls and Toronto over the Grand Trunk to North Bay, with through sleeping cars to Porcupine and Cobalt. From Chicago, the west and southwest, take the Grand Trunk at Chicago, making close connection with the through express trains leaving Toronto daily. From Detroit excellent service via Grand Trunk to Toronto, where close connection is made for Cobalt.

THE
COBALT-GOWGANDA
DISTRICT
ONTARIO



For full information regarding routes and rates, call on write or to any of the following Grand Trunk Railway System Agencies, when full particulars will be sent.

PASSENGER AND TRAVELLING AGENTS

Alexandria Bay, N.Y. CORNWALL BROS., Ticket Agents, Market Street.
 Battle Creek, Mich. L. J. BUSH, Passenger Agent, G. T. Ry. Station.
 Bay City, Mich. FRED C. WHERRETT, Passenger Agent, G. T. Ry. Station.
 Boston, Mass. E. H. BOYNTON, New England Passenger Agent, 256 Washington Street.
 " J. M. SHEA, Travelling Passenger Agent, 256 Washington Street.
 Brockville, Ont. J. H. FULFORD, Ticket Agent, 8 Court House Avenue.
 Buffalo, N. Y. H. M. MORGAN, City Passenger and Ticket Agent, 285 Main Street (Ellicott Square Building).
 Chicago, Ill. C. G. ORTENBURGER, City Passenger and Ticket Agent, 301 South Clark Street, corner Jackson Boulevard.
 " FRANKS TICKET AND TOURIST CO., 121 South Clark Street.
 " F. E. SCOTT, Ticket Agent, Auditorium Annex, corner Michigan Avenue and Congress Street, and Palmer House.
 " O. C. BRYANT, Travelling Passenger Agent, Room 917, Merchants' Loan and Trust Building, 112 West Adams Street.
 " M. J. CORCORAN, Travelling Passenger Agent, Room 917, Merchants' Loan and Trust Building, 112 West Adams Street.
 Cortland, N. Y. D. P. DREWERY, Travelling Passenger Agent, 6 Burgess Block.
 " R. BUSHBY, Passenger Agent, 6 Burgess Block.
 Detroit, Mich. C. M. HARWOOD, Travelling Passenger Agent, 118 Woodward Avenue.
 " GEO. W. WATSON, City Passenger and Ticket Agent, 118 Woodward Avenue.
 Flint, Mich. V. A. BOVEE, Passenger Agent, G. T. Ry. Station.
 Grand Rapids, Mich. C. A. JUSTIN, City Passenger and Ticket Agent, G. T. Ry. Station.
 Hamilton, Ont. C. R. MORGAN, Acting City Passenger and Ticket Agent, 11 James Street North.
 Kansas City, Mo. GAY W. NORMAN, Travelling Passenger Agent, 327 Sheldley Building.
 Kingston, Ont. J. P. HANLEY, City Passenger and Ticket Agent, 67 Earl Street.
 Lansing, Mich. F. H. POTTER, Passenger Agent, G. T. Ry. Station.
 Lewiston, Me. F. P. CHANDLER, Passenger Agent, G. T. Ry. Station.
 London, Ont. R. E. RUSE, City Passenger and Ticket Agent, corner Richmond and Dundas Streets.
 Los Angeles, Cal. W. H. BULLEN, Pacific Coast Agent, 302 Wilcox Building.
 Milwaukee, Wis. CROSBY TRANSPORTATION CO., 396 East Water Street.
 Moncton, N. B. J. H. CORCORAN, Travelling Passenger Agent, 868 Main Street.
 Montreal, Que. J. QUINLIN, District Passenger Agent, Bonaventure Station.
 " R. McC. SMITH, Special Passenger Agent.
 " W. S. MILLER, Travelling Passenger Agent, Bonaventure Station.
 " M. O. DAFOE, Travelling Passenger Agent, Bonaventure Station.
 " W. H. CLANCY, City Passenger and Ticket Agent, 130 St. James Street.
 " W. H. O'DONNELL, Steamship Agent, 130 St. James Street.
 Mt. Clemens, Mich. CASPER CZIZEK, City Passenger and Ticket Agent, 12 South Gratiot Avenue.
 New York, N. Y. F. P. DWYER, General Agent Passenger Department, Railway Exchange, 290 Broadway.
 Niagara Falls, N. Y. D. ISAACS, Ticket Agent, Prospect House.
 " W. B. PRESCOTT, City Passenger and Ticket Agent, 1 Falls Street.
 Ogdensburg, N. Y. GEO. S. MEAGHER, Ticket Agent, 55 State Street.
 Ottawa, Ont. PERCY M. BUTLER, City Passenger and Ticket Agent, Russell House Block, corner Sparks and Elgin Streets.
 Peterboro, Ont. B. A. ROSE, City Passenger and Ticket Agent, 334 George Street.
 Pittsburg, Pa. W. ROBINSON, Travelling Passenger Agent, 507 Park Building.
 Port Huron, Mich. T. C. MANN, Ticket Agent, G. T. Ry. Station.
 Portland, Me. C. E. TENNY, Passenger Agent, G. T. Ry. Station.
 Quebec, Que. GEO. H. STOTT, City Passenger and Ticket Agent, corner St. Anne and DuFort Streets, and Ferry Landing, Dalhousie Street.
 Saginaw, Mich. HUGH E. QUICK, Passenger Agent, G. T. Ry. Station.
 San Francisco, Cal. F. W. HOPPER, General Agent Passenger Department, 399 Monadnock Building.
 Seattle, Wash. J. H. BURGIS, General Agent, Passenger Department, First Avenue and Vesler Way.
 Sherbrooke, Que. C. H. FORT, City Passenger and Ticket Agent, 2 Wellington Street.
 South Bend, Ind. C. A. MCINTOSH, Passenger Agent, G. T. Ry. Station.
 St. Paul, Minn. W. J. GILKINSON, Travelling Passenger Agent, 400 Robert Street.
 Toronto, Ont. A. E. DUFF, District Passenger Agent, Union Station.
 " C. S. PROCTOR, Travelling Passenger Agent, Union Station.
 " C. E. JENNEY, Travelling Passenger Agent, Union Station.
 " C. E. HORNING, City Passenger and Ticket Agent, Northwest corner King and Yonge Streets.
 Vancouver, B. C. H. G. SMITH, City Passenger and Ticket Agent, 527 Granville Street.
 Victoria, B. C. W. E. DUPEROW, City Passenger and Ticket Agent, G. T. P. Dock.
 Winnipeg, Man. W. J. QUINLAN, District Passenger Agent, 260 Portage Ave.

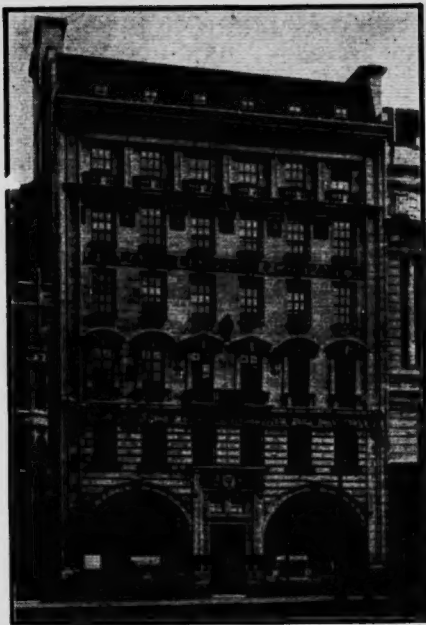
W. E. DAVIS,
 Passenger Traffic Manager,
 Montreal.

G. T. BELL,
 Asst. Passenger Traffic Manager,
 Montreal.

H. G. ELLIOTT,
 General Passenger Agent,
 Montreal.

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GRAND TRUNK RAILWAY SYSTEM'S EUROPEAN ORGANIZATION.



**Grand Trunk System Offices,
London, England.**

The Grand Trunk System has a most complete organization in Europe with every facility at their disposal to help passengers to reach their points of destination in Canada and United States, and at their different offices, a list of which can be found in this publication, ocean and rail tickets are issued and arrangements can be made for forwarding baggage and covering same with insurance. They are also in a position to supply travellers with convenient forms for carrying money, viz.: Canadian Express Money Orders which may be cashed anywhere in dollars and cents. It will be to the advantage of travellers to consult with any of the European Agencies where the latest publication dealing with Canada can be secured free.

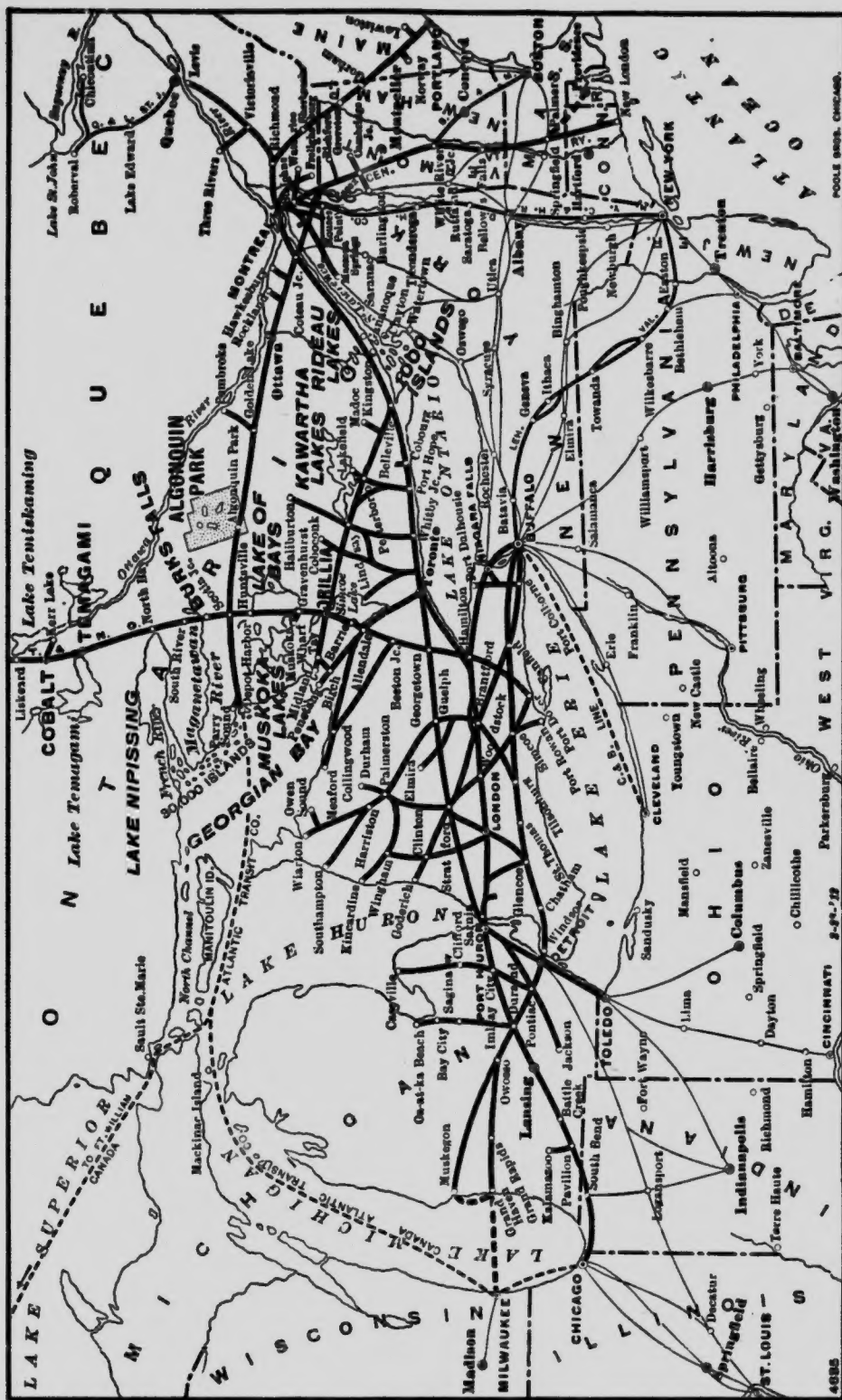
Trans-Atlantic passengers visiting London, Eng., are cordially invited to visit the handsomely

equipped new offices of the Grand Trunk System at 17-19 Cockspur Street, London, S. W., Eng. The site of this new building is one of the best in the great Metropolitan City and in the midst of the busiest centre of London; in fact, it is at the very hub of the world's metropolis. It is within five minutes' walk of a half dozen of the leading hotels, and adjacent to Trafalgar Square, Bakerloo and Piccadilly Tubes. Motor buses pass the door every few seconds to all parts of London—North, South, East and West.

Reception rooms have been sumptuously furnished for the use and comfort of visitors, where writing material may be found, and the leading daily newspapers of Canada are on file.

The Grand Trunk are in a position to book passages to Canada and the United States via any of the ocean routes. This is a great convenience to tourists and business men visiting England or the Continent.

Courteous representatives of the Company are in attendance to give all information to enquirers, and to see that visitors are made at home. If desired, correspondence may be addressed in care of this office.



MAP OF THE GRAND TRUNK RAILWAY SYSTEM.

POOLE BROS. CHICAGO.

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